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10/604,971	08/28/2003	Matthew T. Starr	47320.0116	1970

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EXAMINER

COTTINGHAM, JOHN R

ART UNIT PAPER NUMBER

2116

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/604,971	Applicant(s) STARR ET AL.	
	Examiner John R. Cottingham	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-11,15-19 and 23-31 is/are rejected.
- 7) ☒ Claim(s) 7 12-14 20-22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 26-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26, the term CAN network renders the claim indefinite and the term should be spelled out in the claim.

Claim 27, the term IIC network renders the claim indefinite and the term should be spelled out in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 8-11, 15-19, and 23-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Nicol et al. U.S. Patent 5,429,470. Figures 1-9 shows all of the claimed subject matter of a library.

Regarding claim 1, 1. a robotic data storage library with soft power capability, the library comprising: a plurality of storage locations (tapes), each capable of holding at

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least one data storage element (tapes), a data transfer interface 18 for receiving a data storage element and establishing a communication path (col. 9, lines 1-15) with a data storage element so that data can be transferred between the data storage element and a host computer, a transport unit 14 for moving a data storage element between one of said plurality of storage locations and said data transfer interface, a power supply for providing power to a component (robotic arm 19) of the library, a power switch switchable between an ON state and an OFF state (col. 9, lines 45-60) (the power is switch on and off to the arm before and after it gets and retrieves the tapes, also the tape drives shut on and off depending on a tape being in the drive), and a power controller 158 for monitoring said power switch for a transition between said ON state and said OFF state and switch between after detecting a transition of said power said ON state and said OFF state, controlling the application of power to said component.

Regarding claim 2, said power controller 158 comprises means for terminating the application of power to said component after a fixed amount of time has expired since detecting a transition of said power switch from said ON state to said OFF State. (when no tape is requested the power is shut down to the drive)

Regarding claim 3, wherein: said power controller 158 comprises means for terminating the application of power to said component after a variable amount of time has expired since detecting a transition of said power switch from said ON state to said OFF state. (col. 9, lines 46-60)

Regarding claim 4, wherein: said power controller 158 comprises means for delaying the application of power to said component for a period of time after detection of a transition of said from said OFF state to said ON state.

Regarding claim 5, wherein: said power controller 158 comprises means for sequencing a power output of said power supply with a second power output of a second power supply.

Regarding claim 6, wherein: power input interface for said power supply comprises a receiving power from a power source and a power output interface for providing power to components of the library.

Regarding claim 8, wherein: said power switch comprises an interface that allows an external device to transition said power switch between said ON state and said OFF state.

Regarding claim 9, wherein: said interface comprises a host computer interface that allows a host computer to transition said power switch between said ON state and said OFF state.

Regarding claim 10, wherein; said interface comprises an uninterruptible power supply interface that allows an uninterruptible power supply to transition said power switch from said ON state to said OFF state. (has first and second power supplies that can transition between, and the host computer controls the on/off and thus meeting the claimed limitations)

Regarding claim 11, a robotic data storage library with soft power capability, the library comprising: a plurality of storage locations (tapes), each capable of holding at

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least one data storage element; a data transfer interface for receiving a data storage element and establishing a communication path (col. 9, lines 1-15) with a data storage element (tape) so that data can be transferred between the data storage element and a host computer; a transport unit for moving a data storage element between one of said plurality of storage locations and said data transfer interface; a power supply for providing power to a component of the library; a power switch switchable between an ON state and an OFF state', a power controller for monitoring said power switch for a transition from said OFF state to said ON state and, after detecting a transition of said power switch from said OFF state to said ON state, delaying the application of power to said component for a period of time after detection of said transition of said power switch from said OFF state to said ON state. (col. 9, lines 45-60) (the power is switch on and off to the arm before and after it gets and retrieves the tapes, also the tape drives shut on and off depending on a tape being in the drive).

Regarding claim 18, a robotic data storage library with soft power capability, the library comprising: a plurality of storage locations¹⁰, each capable of holding at least one data storage element (tapes) a data transfer interface for receiving a data storage element and establishing a communication path (col. 9, lines 1-15) with a data storage element so that data can be transferred between the data storage element and a host computer; a transport unit 19 for moving a data storage element between one of said plurality of storage locations and said data transfer interface; a power supply for providing power to a component of the library; a power switch switchable between an ON state and an OFF state; a power controller 158 for monitoring said power switch for

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a transition from said ON state to said OFF state and after detecting a transition of said power switch from said ON state to said OFF state, issuing a power termination message to said component concerning the termination of the application of power to said component. (col. 9, lines 45-60) (the power is switch on and off to the arm before and after it gets and retrieves the tapes, also the tape drives shut on and off depending on a tape being in the drive).

Regarding claim 19, wherein; comprises means for terminating the application of power to said component after a fixed amount of time has expired since issuing said power termination message to said component. (when no tape is requested the power is shut down to the drive)

Regarding claim 20, (when no tape is requested the power is shut down to the drive)

Regarding claim 23, wherein: said power supply provides power to said power controller independent of supplying power to said components.

Regarding claim 24, wherein: said power controller comprises non-volatile data storage for storing a boot-strap program. (its inherent that a boot-strap program could be stored on the library.)

Regarding claim 25, wherein: said power controller 158 comprises a network for communicating with said component.

Regarding claim 26, where said network comprises a CAN network.

Regarding claim 27, wherein said network comprises an IIC network.

Regarding claim 28, wherein said power controller 158 comprises means for monitoring the power output by said power supply.

Regarding claim 29, further comprising: a second plurality of storage locations for storing data storage elements; a second drive; a second power supply for providing power to a second component of the library; and a slave power controller for receiving a master-slave message from said power controller, wherein said slave power controller controls the application of power to said second component of the library after receiving said master-slave message from said power controller. (see Fig. 2)

Regarding claim 30, wherein said master-slave message comprises said message.

Regarding claim 31, a method for providing soft power capability in a robotic data storage library comprising: providing a data storage library 10 comprising a plurality of storage locations¹⁸, each capable of holding at least one data storage element, a data transfer interface for receiving a data storage element and establishing a communication path (col. 9, lines 1-15) with a data storage element so that data can be transferred between the data storage element and a host computer, a transport unit for moving a data storage element between one of said plurality of storage locations and said data transfer interface, a power supply for providing power to a component power switch switchable between an ON state and an OFF state; monitoring said power switch for a transition between said ON state and said OFF state; and controlling the application of power to said after detecting said transition between component ON state and said OFF state. (col. 9, lines 45-60) (the power is switch on

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and off to the arm before and after it gets and retrieves the tapes, also the tape drives shut on and off depending on a tape being in the drive).

Allowable Subject Matter

5. Claims 7, 12-14, and 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

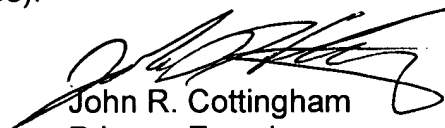
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smith U.S. Patent 6,885,911 and Tzelnic et al. U.S. Patent 6,366,987 show similar inventions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R. Cottingham whose telephone number is (571) 272-7079. The examiner can normally be reached on Monday - Thursday, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571)272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John R. Cottingham
Primary Examiner
Art Unit 2116

jrc